Return

Project Tracking No.: P-002-FY05-DHS

Return on Investment (ROI) Program Funding Application

This template was built using the ITD ROI Submission Intranet application.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform post implementation outcome audits for all Pooled Technology funded projects and may perform audits on other projects.

This is a Pooled Technology Fund Request. Amount of funding requested: $1,975,000.00

Section I: Proposal

Date:	7/24/2003
Agency Name:	DHS - Administration
Project Name:	Common Front End
Agency Manager:	Steve Mosena
Agency Manager Phone Number / E-Mail:	(515)281-8708 / smosena@dhs.state.ia.us
Executive Sponsor (Agency Director or Designee):	Steve Mosena

D. Statutory or Other Requirements

Is this project or expenditure necessary for compliance with a Federal law, rule, or order?
☐ YES (If "Yes", cite the specific Federal law, rule or order, with a short explanation of how this project is impacted by it.)
Explanation:

Is this project or expenditure required by state law, rule or order?
☑ YES (If "YES", cite the specific state law, rule or order, with a short explanation of how this project is impacted by it.)
Explanation:
This initiative is part of departments process to meet the requirements setforth in HF2205.

Does this project or expenditure meet a health, safety or security requirement?
☑ YES (If "YES", explain.)
Explanation:
Health and Safety are two primary goals for the Department. This initiative will provide the citizens of Iowa greater access to the DHS programs that promote Health and Safety. Utilizing this Common Front End approach also provides mechanisms for greater security of data while at the same time increasing accessability.

Is this project or expenditure necessary for compliance with an enterprise technology standard?

☑ YES (If "YES", cite the specific standard.)

Explanation:

State Access Control Standard and Database Management System Standard.

[This section to be scored by application evaluator.]

Evaluation (20 Points Maximum)

If the answer to these criteria is "no," the point value is zero (0). Depending upon how directly a qualifying project or expenditure may relate to a particular requirement (federal mandate, state mandate, health-safety-security issue, or compliance with an enterprise technology standard), or satisfies more than one requirement (e.g. it is mandated by state and federal law and fulfills a health and safety mandate), 1-20 points awarded.

E. Impact on Iowa's Citizens

a. Project Participants

List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, other levels of government, etc.) and provide commentary concerning the nature of participant involvement. Be sure to specify who and how many **direct** users the system will impact. Also specify whether the system will be of use to other interested parties: who they may be, how many people are estimated, and how they will use the system.

Response:

Many agencies and external entities will be available to participate in tis initiative. Development will be a cooperative between DHS, ITD and private vendors (TBD). Currenlty several state agencies exchange data with DHS and this initiative will create an environment that breaks down technology barriers for data exchange. A few of the other agencies would include: Dept of Health, Iowa Workforce Development, Vocational Rehabilitation, Department of Education.

b. Service Improvements

Summarize the extent to which the project or expenditure improves service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response:

A. Pre-ProjectThis initiative allows DHS to achieve several goals and meet many of rquirements outlined in State Law, HF 2205. Currently, DHS has over 80 separate systems consisting of mainframe applications, servers, and server applications. In many cases, a program is supported by a combination of all three. The programs on the mainframe are primarily JCL,COBOL, VSAM and IDMS, however, many are supplemented with server applications some of which are off-the-shelf applications and others are internally developed applications. These systems are supported by a wide variety of specialists, both hardware and software. Many of the programs are mandated by either State or Federal Government. For Federal programs, DHS often is not given a choice of system or platform to use. The government will specify a program or platform to keep data and reporting uniform among the different states in the program. To comply with HF 2205, DHS Goals, the Governor’s initiatives, uniform Inter-Agency standards, and increased Cross-Agency support, DHS’s systems must either be completely re-designed or a common front-end installed.The initial analysis conducted to re-design and overall the current systems estimates the project to cost between $30 and $40 million and most likely would not be accomplished in a reasonable timeframe. However, this

is not necessary or desirable due to the advances in database and enterprise technology. To install a common front end the initial estimates conclude the total costs would be less than $4 million and can be completed within a reasonable timeframe. Several years ago DHS began investigating this issue and identified a data warehouse as a critical element to solving this problem. Currently, the SQL data warehouse is funded by DHS and supported by ITD. Additionally, two other projects complete the picture of how this system fits into DHS's information strategy. These are the state e-commerce initiative and the federal e-government initiatives around identity. Collectively these initiatives would create an integrated package that provides greater customer access and improved data security. B. Post-ProjectAs mentioned, this is a set of inter-related initiatives that together provide benefits to all Iowans. The final system will take advantage of the strengths of each component while mitigating the weaknesses of each system. For example, if the mainframe is down, employees can continue accessing information and entering customer data through the warehouse.This initiative will create a common front-end to all current and systems under-development in DHS which provides: a) Universal accessibility to DHS systems via a singular common system or program, b) support for cross-agency accessibility of DHS systems, c) an environment that supports e-commerce and web-based interfaces, d) eliminates the use of legacy-based input/output programming and e) provides the physical I/O layer integrated with ITDs SQL data warehouse and all DHS programs & users. The following is a list of the key features of the system upon completion with a brief description.1. Achieve e-Goverment Goal – This initiative is the logical link between the systems and the users. Without this initiative, to become e-based, a separate and unique e-initiative would have to be accomplished on each system (over 80 separate initiatives).2. Establish and Implement Enterprise Standards – To achieve enterprise standardization each system would have to be re-designed. With this initiative, the front-end is standardized, through ITD and DHS standards. The front end takes care of all access requirements providing a uniform look across all systems (some standardization is accomplished through the data warehouse also).3. Cross-Agency Connectivity – Integration with other State Agencies can be accomplished quickly and simply since the interconnectivity is accomplished through a standardized front-end and not at the systems level.4. Elimination of System Specific I/O Screens – Currently, all input and output screens must be built by programmers who have specialized knowledge in the particular system. With reduced resources, this normally falls to contractors and takes enormous effort and money to accomplish. It can easily cost up to $5,000 to build a simple screen for a system.5. Correlation of Data – Since users need information from several systems, they must get output reports from each system and then manually put the data into a spreadsheet or other document to compare and analyze the information. This problem will be eliminated. The user will have data schemas available to them based on their specific security levels and information requirements. This data will come from several systems, however, the user will only see the front-end system.6. Standardization of Data – The current systems were developed over several years. During this time many common data fields (e.g. name) were programmed differently. This requires special programming each time a user needs to cross-check systems information. This system will resolve many of these issues at the front-end level, thereby eliminating the need to reprogram each system with new data definitions and standards.7. Relational Data – This system, in concert with the data warehouse, will create a relational information system. Instead of having to manually evaluate data from several sources to ensure proper accountability, this system will install this feature. This is the baseline to establishing both a Single-Face-to-Customer where one person can help a Customer identify all services they are eligible to receive and to ensuring accountability across programs and to oversight entities.8. Elimination of Redundancies – Currently the same information must be entered into several systems, through separate systems screens, and often in differing formats. This creates high volumes of redundant data on the systems which must be continually cross-checked for accuracy. This system eliminates this issue by writing to all systems which need the same data. Also, with data management tools currently available, we can begin eliminating hardened redundancies and free up expensive mainframe resources while shortening the processing time of system files.9. Reduced Training – When people transfer to different programs, they have to completely learn new systems. With an integrated front-end, the only changing is the data schema available to them. Once trained, the can be operational in a new job significantly faster.10. Availability – Information users will no longer be dependent on researchers or programmers. Nor will they have to wait for output. With client tools currently available, the system information will be readily available at the individuals desk.11. Security – With a common front-end there will be significantly less security issues to manage. The primary security will be accomplished through the front-end and not have to be continually updated on each system. Unauthorized access will be quicker and easier to detect.12. Accessibility – Services will be easier to access by the Customers. This system will enable integration, across all current system boundaries, of total services available, eligibility, and will allow a Customer to begin access to the service faster, getting them the service they need to ensure Health, Safety, and Stability while promoting Self-Sufficiency.

c. Citizen Impact

Summarize how the project leads to a more informed citizenry, facilitates accountability, and encourages participatory democracy. If this is an extension of another project, what has been the adopted rate of Iowa's citizens or government employees with the preceding project?
Response:

Literally EVERY Iowan and every State organization is positively impacted by this project.Iowa Legislature – Greater access to information regarding DHS programs.Customers – Simpler, easier to find and use information about DHS services. Provides eligibility screening, and uniform and unified access to multiple services.DHS Employees – Better services provided to our Customers.Other State Agencies – Reduced costs involved in standardizing their access into DHS systems.Providers – Better cross-program accountability of services provided. Better management of venders included in DHS services programs.

d. Public Health and/or Safety

Explain requirements or impact on the health and safety of the public.
Response:

[This section to be scored by application evaluator.]

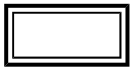
Evaluation (10 Points Maximum)

- Minimally improves Customer Service (0-3 points).
- Moderately improves Customer Service (4-6 points).
- Significantly improves Customer Service (7-10 points).

[This section to be scored by application evaluator.]

Evaluation (15 Points Maximum)

- Minimally directly impacts Iowa citizens (0-5 points).
- Moderately directly impacts Iowa citizens (6-10 points).
- Significantly directly impacts Iowa citizens (11-15 points).



F. Process Reengineering

Provide a pre-project or pre-expenditure (before implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens interact with the current system.
Response:
Pre-project Description - Currently DHS operates 80 systems that provide a variety of benefits, collect data for federal reporting requirements and provide management with prograomatic data. This systems have been developed over the last 25 years and even though they pass data, they are very siloed by program function. DHS workers must navigate in and out of these systems to determine client eligibility for the different programs. This process is very inefficient and data entry is duplicative. No single repository of data exists so when DHS staff are asked to analyze data from programs the work is very labor intensive.

Provide a post-project or post-expenditure (after implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens will interact with the proposed system. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response:

Post-project Description - The concept of a Common Front-End built around the DHS/ITD SQL data warehouse will significantly change the way customers can interact with DHS and how DHS staff will utilize the systems. Data from the individual DHS systems will be copied to the SQL data warehouse on a defined schedule. This will allow staff to perform enhanced reporting capabilities and ensure greater accuracy in federal reporting. The new Common Front-End will incorporate web technology allowing DHS customers greater access to program information and potential online eligibility determination. Additionally, DHS staff will have one access point into all DHS systems. No longer will they be required to travers a complicated set of individual sytems with unique input requirements. This will greatly increase their efficiencey allowing them to better serve clients.

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- Minimal use of information technology to reengineer government processes (0-3 points).
- Moderate use of information technology to reengineer government processes (4-6 points).
- Significant use of information technology to reengineer government processes (7-10).

[This section to be scored by application evaluator.]

Evaluation (5 Points Maximum)

- The timeline contains several problem areas (0-2 points)
- The timeline seems reasonable with few problem areas (3-4 points)
- The timeline seems reasonable with no problem areas (5)

H. Funding Requirements

On a fiscal year basis, enter the estimated cost by funding source: Be sure to include developmental costs and ongoing costs, such as those for hosting the site, maintenance, upgrades, ...

	FY05		FY06		FY07	
	Cost($)	% Total Cost	Cost($)	% Total Cost	Cost($)	% Total Cost
State General Fund	$0	0%	$0	0%	$0	0%
Pooled Tech. Fund /IowAccess Fund	$1,975,000	50%	$250,000	50%	$125,000	50%
Federal Funds	$1,975,000	50%	$250,000	50%	$125,000	50%
Local Gov. Funds	$0	0%	$0	0%	$0	0%
Grant or Private Funds	$0	0%	$0	0%	$0	0%
Other Funds (Specify)	$0	0%	$0	0%	$0	0%
Total Project Cost	$3,950,000	100%	$500,000	100%	$250,000	100%
Non-Pooled Tech. Total	$1,975,000	50%	$250,000	50%	$125,000	50%

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- The funding request contains questionable items (0-3 points)
- The funding request seems reasonable with few questionable items (4-6 points)
- The funding request seems reasonable with no problem areas (7-10)

I. Scope

Is this project the first part of a future, larger project?
☑ YES (If "YES", explain.) ☐ NO, it is a stand-alone project.
Explanation:
The largest percentage of work and funding for this projecct will occur in FY05. In subsequent years, FY06 and FY07, additional system access will be incorporated.

Is this project a continuation of a previously begun project?
☑ YES (If "YES", explain.)
Explanation:
This expands upon the SQL data warehouse initiative jointly developed by ITD and DHS.

J. Source of Funds

On a fiscal year basis, how much of the total project cost ($ amount and %) would be absorbed by your agency from non-Pooled Technology and/or IOWAccess funds? If desired, provide additional comment / response below.
Response:
Fifty percent of the funding required to complete this project will come from federal matching opportunities.

[This section to be scored by application evaluator.]

Evaluation (5 Points Maximum)

- 0% (0 points)
- 1%-12% (1 point)
- 13%-25% (2 points)
- 25%-38% (3 points)
- 39%-50% (4 points)
- Over 50% (5 points)

Section II: Financial Analysis

A. Project Budget Table

It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related.

The Total Annual Prorated Cost (State Share) will be calculated based on the following equation:

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right) \times \%\ State\ Share\right] + (Annual\ Ongoing\ Cost \times \%\ State\ Share) = Annual\ Prorated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$0	1	0.00%	$0	0.00%	$0
Software	$100,000	4	50.00%	$8,000	50.00%	$16,500
Hardware	$50,000	3	50.00%	$0	0.00%	$8,333
Training	$200,000	4	50.00%	$0	0.00%	$25,000
Facilities	$100,000	1	50.00%	$0	0.00%	$50,000
Professional Services	$3,000,000	4	50.00%	$50,000	50.00%	$400,000
ITD Services	$500,000	4	50.00%	$50,000	50.00%	$87,500
Supplies, Maint, etc.	$0	1	0.00%	$0	0.00%	$0
Other	$0	1	0.00%	$0	0.00%	$0
Totals	$3,950,000	---	---	$108,000	---	$587,333

C. Tangible and/or Intangible Benefits

Respond to the following and transfer data to the ROI Financial Worksheet as necessary:

1. Annual Pre-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation.
Describe Annual Pre-Project Cost:
Currently 680,000 Iowans are served annually by DHS. If we assume for conservative estimates it takes two hours of involvement between Iowan and a DHS employee to determine availability and eligibility for utilizing the new access process, the annual pre-project costs would be. $24,48,000 1,360,000 DHS Employee Hours (2 hrs per client) @ $18 per hr = $24,480,000The State Government Benefit would not be in the elimination of FTEs but would be realized through a reduction in need for additional FTEs to meet the increasing case load per worker.

Quantify Annual Pre-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$14,688,000.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Pre-Project Cost:	$14,688,000.00

2. Annual Post-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process after project implementation.

Describe Annual Post-Project Cost:

Currently, 680,000 Iowans are served annually by DHS. If we assume for conservative estimates it takes 1 1/2 hours of involvement between the Iowan and a DHS employee to determine availablility and eligibility for DHS services utilizing the new access process, the annual post-project costs would be realized. 1,020,000 DHS Employee Hrs @ $18 per hr (1 1/2 hrs per client) = $18,360,000. The State Government Benefit would not be in the elimination of FTEs but would be realized through a reduction in need for additional FTEs to meet the increasing case load per worker.

Quantify Annual Post-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$11,016,000.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Post-Project Cost:	$11,016,000.00

3. Citizen Benefit - Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time.

Describe savings justification:

Transaction Savings

Number of annual online transactions:	3
Hours saved/transaction:	1
Number of Citizens affected:	680,000
Value of Citizen Hour	10
Total Transaction Savings:	$20,400,000
Other Savings (Describe)	$0
Total Savings:	$21,726,000

4. Opportunity Value/Risk or Loss avoidance - Quantify the estimated annual non-operations benefit

to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or Federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:
If this project is not initiated, $1.25 million in federal matching dollars will be lost.

5. Benefits Not Readily Quantifiable - List and summarize the overall non-quantifiable benefits (i.e., IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.).
Response:
10 - Reconnect Iowans to Government -Critical component to meeting the DHS's Goals to reconnect Iowans to DHS services by making access more convenient both in method and location. Reduces costs of determining availability, eligibility, and accessibility and starting the process of getting the Customer the service they need.10 - Provides mechanism (through client or e-based access) for State Executives such as the Governor's Staff, Elected State and Federal Representatives (House & Senate) , and Oversight Executives to access information directly from their workstation.10 - Establishes DHS as open architecture, uniform standards-based integrated system. Enables goal of integrating DHS with other State Agencies to provide higher levels of service and decreases costs associated with upgrades and system enhancements.10 - Transforms DHS from being a reactive service provider into a proactive service provider. With integration into other State systems, queries can be run to identify Iowans who may be eligible for State services and notify them electronically.10 - Self-Sufficiency. Promotes Customer and Community self-sufficiency by creating the entire population of Iowa as potential service provisioners. For example, a person in need could turn to their minister, neighbor, or other member of the community for help in identifying the availability of services.

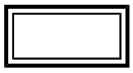
ROI Financial Worksheet	
A. Total Annual Pre-Project cost (State Share from Section II C1):	$14,688,000
B. Total Annual Post-Project cost (State Share from Section II C2):	$11,016,000
State Government Benefit (= A-B):	$3,672,000
Annual Benefit Summary:	$3,672,000
State Government Benefit:	$3,672,000
Citizen Benefit:	$21,726,000
Opportunity Value or Risk/Loss Avoidance Benefit:	$0
C. Total Annual Project Benefit:	$25,398,000
D. Annual Prorated Cost (From Budget Table):	$587,333
Benefit / Cost Ratio: (C/D) =	43.24
Return On Investment (ROI): ((C-D) / Requested Project Funds) * 100 =	1,256.24%

[This section to be scored by application evaluator.]

Evaluation (25 Points Maximum)

- The financial analysis contains several questionable entries and provides minimal financial benefit to citizens (0-8 points).

- The financial analysis seems reasonable with few questionable entries and provides a moderate financial benefit to citizens (9-16 points).
- The financial analysis seems reasonable with no problem areas and provides maximum financial benefit to citizens (17-25).



Note: For projects where no State Government Benefit, Citizen Benefit, or Opportunity Value or Risk/Loss Avoidance Benefit is created due to the nature of the project, the Benefit/Cost Ratio and Return on Investment values are set to Zero.

Appendix A. Auditable Outcome Measures

For each of the following categories, list the auditable metrics for success after implementation and identify how they will be measured.

1. Improved customer service

Customer inquiries will be conducted to gain their feedback regarding the new system.

2. Citizen impact

Citizen impact will be measured through customer inquiries and by the number of "hits" on the system.

3. Cost Savings

Determining the number of customer "hits" or inquiries into the system will provide a benchmark for calculating customer savings,

4. Project reengineering

Project reenfineering will be evaluated by the documentation and monitoring of the new technologies used throughout this project. i.e. SQL data warehouse, web interface. etc.

5. Source of funds (Budget %)

No response required.

6. Tangible/Intangible benefits

Intangible benefits will be measured through customer and worker inquiries.

Return